



Drivers of job satisfaction as related to work performance in Macao casino hotels

An investigation based on employee survey

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Work performance
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Abstract

Purpose – This paper sets out to examine the relationship between work performance and job satisfaction in Macao's casino hotels and to attempt to determine how job satisfaction may be enhanced to improve work performance.

Design/methodology/approach – A survey was conducted among Macao casino hotels' employees to collect data on work performance and job satisfaction. Coefficients of correlations were computed to determine the relationship between the two. Job satisfaction drivers were identified through backward stepwise regression analysis.

Findings – Mediocre interpersonal skills are the major weakness of the labor force and job satisfaction is significantly correlated with job performance. Training opportunities, salaries and benefits, and support from colleagues and superiors are significant drivers of job satisfaction.

Research limitations/implications – The paper used convenience sampling and the survey was not exhaustive to include all possible job satisfaction drivers. Also, social desirability bias may exist in the employee survey. Future research should use probability sampling, if possible, and include more potential job satisfaction variables to find out how employee job satisfaction may be maximized. Furthermore, a study based on customer survey is desired for examining Macao casino workforce performance. While the findings are applicable to Macao casino hotels, they do provide evidence from the gaming industry to support the theory on job satisfaction drivers. The findings may also carry important implications for gaming jurisdictions with low incomes such as those in East Europe and Southeast Asia.

Practical implications – The study provides an assessment of the Macao casino hotel workers' performance and job satisfaction and offers useful insights on how work performance and job satisfaction may be improved. On-the-job training is proposed for the industry to boost job satisfaction and work performance.

Originality/value – Labor force performance has been a concern for the Macao gaming industry but has been thinly researched. The paper identifies problems in work performance as related to job satisfaction and proposes solutions. The identified solutions should help improve job satisfaction and workforce performance for Macao casino hotels.

Keywords Casinos, Job satisfaction, Drivers, South East Asia, Europe

Paper type Research paper



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Introduction

Macao's casino gaming industry has experienced rapid growth since Macao opened its door to foreign casino operators in 2002. According to Gaming Inspection and Coordination Bureau (GICB) of the Macao Special Administrative Region (SAR) (2008), in 2006, Macao generated \$7.08 billion gaming revenue, replacing the Las Vegas Strip as the no. 1 gaming destination in the world. In 2007, Macao's gaming revenue climbed to a new record, \$10.38 billion (GICB, 2008). The fast growth of the Macao's gaming industry, however, is not without problem and the biggest challenge comes from labor force deficiency, in terms of both quantity and quality.

With a population of only half million and a labor force of 276,000 (Bureau of Statistics and Census of Macao, 2006a), it has been difficult for Macao casino industry to find enough employees to meet the demand for expansion. According to *Macao Daily* ("Gaming employees reach", 2007), at the end of 2006, Macao casino hotels had a total of 5,631 unfilled positions. On the other hand, work performance remains a serious issue. In November 2006, while facing a labor shortage, the Sands Casino in Macao had to lay off over 100 unqualified dealers ("Large-scale layoff", 2006). Realizing the serious labor underperformance in the industry, one Macao legislator suggested that the government should pay more attention to workforce quality while helping the industry find enough hands ("Guan Chuixing hopes", 2007).

Casino employees' work performance involves both job skill and work ethics aspects. To solve performance problems in the Macao casino hotel industry, it needs first of all a thorough assessment of the current status of the workforce performance. Problems must be first identified before they can be solved. This study analyzed the industry's labor force performance by conducting a survey among Macao casino employees with a focus on job skills and work ethics. Further, job satisfaction was examined in its relationship with work performance. Finally, factors contributing to job satisfaction were investigated to determine how Macao casino hotels might improve job satisfaction and work performance.

Labor force quality has been a concern for the Macao casino hotel industry. In order to be a top gaming destination in the world, Macao's gaming industry must have a high-quality workforce that can produce top performance. To the best of our knowledge, however, there is a lack of documented research on the matter. This study attempts to examine the issue by conducting an extensive survey among Macao casino hotel employees. The findings of the study should provide Macao's gaming industry with useful insights on the status of Macao gaming labor quality and ways for improvement.

Important work performance variables for casino employees

The casino industry is a service industry that involves significant amount of person-to-person interactions between employees, especially dealers, and customers. Therefore, both technical and interpersonal skills are essential components of work performance. These skills will directly affect the quality of a casino hotel's customer service.

Commenting on technical skill requirements of dealers, the main body of casino labor force, Eade and Eade (1997) point out that a good dealer should have mastery of a wide range of table games and good math ability to ensure payoff accuracy and speedy handling. According to Ellis (2006, 2007), while casino workers' technical and

communication skills are vital, employee's confidence and courtesy also contribute greatly to customer satisfaction. Confidence and courtesy are often reflected in workers' greeting and smiling to customers and willingness to help. Especially, as *Harvard Business Review* (2007) points out, smile is essential in making customers satisfied in hospitality business. An employee's big smile is viewed by a customer as demonstration of competency and he or she would feel happy when treated by a competent employee. In employee manuals of major Las Vegas Strip casino hotels, communication skill, greeting, smiling, and being helpful are heavily emphasized job requirements. These skills are also stressed as essential requirements for casino workers in other casino jurisdictions such as Canada ("Essential skills – casino occupations", 2008) and Minnesota ("Career: casino gaming workers", 2007).

Commenting on the job requirements for casino dealers, a Macao casino executive with over 20 years' casino experience suggested that dealer performance should be judged from both technical and humanization aspects and the dealer job must be humanized by adding more interpersonal requirements in Macao ("Dealer job should be", 2006). As the executive pointed out, being customer-friendly and communicating well with customers are as essential as game skills. Remarking on customer service in Macao casinos, Kale (2006) proposed that customer-centrism should be established among casino employees and they need to learn how to greet customers, diagnose customer problems, demonstrate customer empathy and communicate effectively with guests. McCain *et al.* (2005) have identified this humanization aspect as a form of functional quality (e.g. interpersonal communication skills of casino employees) that is more important than technical quality (e.g. operations of different games) for existing casino hotels in their efforts to improve service quality and cultivate customer loyalty.

In a casino working environment, work performance involves not only job skills but also an important work ethics issue regarding tips. Tip hustle upsets players and has been a big work ethics issue in casinos. Dealers who are friendly, competent and make game play a pleasant experience deserve and earn their tips. However, players do not have to tip rude or incompetent dealers or dealers who are more interested in hustling tips than giving decent service (Grochowski, 2001). Tip hustle is ethically unacceptable and should be prohibited.

Importance of job satisfaction

In a service industry, while good technical and interpersonal skills are essential, the two alone cannot warrant customer satisfaction. Customer services are provided by the casino employee and the employee's mood must directly affect the services provided. Therefore, customer satisfaction is backed up by employee job satisfaction. Employee satisfaction is demonstrated in the process of delivering services and felt by customers. It is indeed an integral part of the labor force quality issue.

Pearce (1992) points out that outputs from the service industries are intangible goods and quality or value of services gained by the consumers are largely determined by the instantaneous performance of the service employees. In a gaming operation, services are jointly provided by dealers and related personnel and the on-site performance of the casino employees determine the service quality extended to the customers. Employee job satisfaction directly impacts the mood and manner in which the service is performed and hence affecting the service quality experienced by the customer. Extensive studies suggest that job satisfaction plays a crucial role in

sustaining the performance of service employees in the workplace, hence the service quality provided to customers (Lee *et al.*, 2006; Karl and Peluchette, 2006; MacKenzie *et al.*, 1998; Netemeyer *et al.*, 1997; Rogers *et al.*, 1994; Hoffman and Ingram, 1992).

As ascertained by Hoffman and Ingram (1992), if a business wants to satisfy the needs of its customers, it must first satisfy the needs of its employees. Front-line workers' overall job satisfaction is positively correlated with their customer-oriented behavior. Rogers *et al.* (1994) points out that for service employees who frequently interact with customers, "it is very difficult to serve customers well when employees are unhappy and disgruntled about some aspect of their job" (p. 20). Generally speaking, satisfied employees create satisfied customers (Karl and Peluchette, 2006).

Employee satisfaction not only ensures customer service quality, but also contributes to employee retention and commitment, hence adding to the human assets quality of a firm and elevating its competitiveness in the market (Lee *et al.*, 2006). Empirically, Karl and Peluchette (2006) found that satisfied employees believed that their organization provided customer service that was reliable, responsive, and empathetic, and that employees were knowledgeable and able to instill confidence in customers. Bai (2006) also found job satisfaction and internal service quality to have positive relationships with organizational commitment, which "is of paramount importance to hospitality companies that strive for competitive advantage" (p. 40). With respect to the impact of job satisfaction on turnover intention, many studies (Choi, 2006; Kim, 1998; Lee and Lee, 2003; Mobley, 1982; Price, 1977) conclude that highly satisfied employees are less likely to seek new employment. Given the importance of job satisfaction for service quality and organizational commitment, it is essential for service firms to understand the drivers behind employee job satisfaction.

On the other hand, job stress leads to job dissatisfaction and may lower customer service quality. According to Herzberg (1996), "hygiene factors" linked to work environment and work conditions may cause employee dissatisfaction. In a casino environment, job stress can typically result from constantly changing work shifts, being closely watched by players and surveillance cameras, keeping focused on repetitive action and the changing faces of players, etc. and should be closely monitored (Nordheimer, 1994). Minimizing job stress is an important aspect of job satisfaction for casino workers.

Job satisfaction drivers

As reported by *HR Focus* (2007), the "Society for Human Resources Management (SHRM) 2007 Job Satisfaction Survey" has found that satisfied employees are more likely to stay with their employers and compensation and benefits were ranked equally as the most important ingredients of job satisfaction. These findings confirm results presented in various studies of the service sectors. For example, in their study of Korean hotel employees, Lee *et al.* (2006) uncover that "service reward has a significant influence on job satisfaction and organizational commitment" (p. 251). In the studies by Dwyer *et al.* (1987) and Jones (1986), better pay was found to lead to greater job satisfaction and lower employee turnover intention.

In addition to compensation and benefits, the "SHRM 2007 Job Satisfaction Survey" (*HR Focus*, 2007) also reveals that job satisfaction of service employees is affected by such elements as communication between employees and senior management, relationship with immediate supervisor, and management recognition of employee job.

These attributes are in congruence with findings from earlier studies. For example, Rogers *et al.* (1994) have found that employee job satisfaction is negatively affected by job tension, and positively affected by role clarity. MacKenzie *et al.* (1998) claims that employee job satisfaction is negatively affected by both role ambiguity and role conflict. Reviewing literature on employee turnover in the hospitality industry, Bai (2006) summarizes that turnover decisions of employees are influenced by such job characteristics as “employee feedback, identification of tasks, interaction between individuals and their opportunities for friendship” (p. 40). Indeed, effective communication between employees at various levels and management recognition of employee job performance are essential to promote role clarity, and lessen job tension. Especially, support, encouragement, guidance and help from management and colleagues are likely to promote a harmonious working environment in which employee job satisfaction is likely to sustain. Choi (2006) examined factors influencing employee turnover intention in Korean hotels and found that the need-award match construct, consisting of sense of achievement, worth, co-workers and compensation, had a strong negative impact on such intention.

Last but not the least, many recent studies have identified that offering of continuous job training to service employees (especially those who interact with high volume of customers everyday) would improve their job satisfaction, hence organizational performance. Training would “improve skills and abilities relevant to employees’ tasks and development”, and “increase employees’ satisfaction with their jobs and workplaces” (Harel and Tzafrir, 1999, p. 187). According to Harel and Tzafrir (1999), “the single independent variable found to be statistically significant in affecting perceived organizational performance was training practices” (p. 185). Moreover, training is an essential factor for strengthening employees’ commitment to the firm. Lee *et al.* (2006) found that training was positively associated with service workers’ job satisfaction and organizational commitment.

Realizing the importance of job satisfaction on work performance and service quality, this study examines not only job performance but also its relationship with employee job satisfaction and factors contributing to job satisfaction.

Research methodology

Design of the survey

To examine the relationship between employee work performance and job satisfaction, inputs were directly obtained from Macao casino hotel employees via survey interviews. A questionnaire with questions regarding job skills, work ethics and job satisfaction was designed. After revisions based on pilot-tests of the survey among 35 gaming-major students of the University of Macao and 15 casino employees, the survey was finalized with 23 questions.

The first six questions were about survey participants’ backgrounds including age, education, job position, prior training program participation, company affiliation, and work experience (years) in the casino industry. The next ten questions asked casino employees to self assess their job performance as follows:

- (7) How fluent is your Mandarin Chinese?
- (8) How difficult is it for you to communicate with Mandarin-speaking customers?

- (9) Do you know any foreign language(s) (specify)?
- (10) How often do you smile to guests?
- (11) How often do you greet guests?
- (12) How often do you take initiative to help guests?
- (13) How often do you ask or hint for tips?
- (14) How often do you make gaming mistakes?
- (15) How many casino games can you operate?
- (16) How skillful are you with the games you operate?

Questions 7 through 9 were about language and communication ability. Mandarin-speaking visitors from China's Mainland and Taiwan were the majority (61 percent) of tourists to Macao in 2006 (Bureau of Statistics and Census of Macao, 2006b). Being able to speak Mandarin is an important job skill. On the other hand, the openings of a series of Las Vegas-style casinos in Macao are transforming Macao from a regional market to an international destination, making foreign language ability increasingly important and thus employees' foreign language knowledge was also surveyed.

Questions 10 to 12 were about "smile", "greet", and "help" features related to personal skills. Questions 13 to 16 were for dealers only. Question 13 was designed to examine dealer ethics in terms of tip pursuit. Dealers' tip pursuit would upset players and is strictly prohibited in Las Vegas Strip casinos but was commonplace in Macao casinos in the old days. Questions 14 through 16 evaluate dealers' gaming skills.

The five-point Likert scale was used for all the previously mentioned questions except Questions 9 and 15. Here, 1 means the worst situation; 2 indicates a unfavorable level; 3 implies a mediocre or average state; 4 represents a situation that is satisfactory or better than average; and 5 refers to the most desirable status. Knowledge of foreign language(s) (Question 9) was measured as a dummy variable with 0 indicating knowing no foreign language(s) and 1 indicating knowing at least one foreign language. For Question 15, measurement was the actual number of games the dealer can handle. To investigate casino employees' job satisfaction, the following questions were asked based on reviewed literature and survey pilot test.

- (17) How satisfied are you with your casino?
- (18) How satisfied are you with your salary and benefits?
- (19) How often do you receive support, encouragement, guidance and help from your superiors and coworkers?
- (20) How sufficient is the job training provided by your casino?
- (21) How do you feel about job-related stress?
- (22) How do you intend to transfer to another casino?
- (23) How do you intend to quit working in the casino industry?

Question 17 was about employees' overall satisfaction with the firm and Questions 18 through 21 focused on factors that may affect job satisfaction. The last two questions were about the employee's loyalty to the casino and the industry, providing further insight into job satisfaction. Here, the five-point likert scale was again used for measurement. For Questions 17-20, 1 means the most unfavorable or worst situation; 2 indicates a unfavorable level; 3 implies mediocre or average; 4 represents a situation that is satisfactory or better than average; and 5 refers to a very satisfactory or excellent status. For Questions 21-23, however, the five-point likert scale was used in an opposite direction, with higher scores indicating less desirable situations.

Convenience sampling

As an exploratory study, our investigation used the convenience sampling method to collect data from Macao casino employees. According to Zikmund (1996), convenience sampling refers to the sampling method of obtaining information from the people or units that are most conveniently available. Researchers generally use convenience samples to gather a large number of completed questionnaires quickly and economically. Convenience samples are best used for exploratory research when additional research will subsequently be conducted with a probability sample.

The survey was carried out by the gaming major students of the University of Macao in March, 2007. To conduct the survey, the students approached casino employees who were their family members, relatives or friends or were referred to them by family members, relatives or friends. Verbal consent to the survey was obtained from the surveyed before the survey started. A casino employee would be skipped if he or she had already been surveyed by another student. A total of 957 casino employees were contacted and agreed to be surveyed. After deleting feedbacks with incomplete answers, 892 survey forms were retained as the final sample. Among the 892 responses, 399 or 44.7 percent were obtained via phone calls and the rest, 493 or 55.3 percent, were collected via face to face interviews.

Analytical methods

With the measurements of work performance, job satisfaction and job satisfaction drivers provided by the same person, the casino employee respondent, our study was able to analyze the relationship between work performance and job satisfaction and that between job satisfaction and its drivers. For Questions 7 through 23, when applicable, descriptive statistics, including mean, median, and standard deviation, of the likert scores were computed for assessment of the status of work performance and job satisfaction. Furthermore, coefficients of correlations between employee overall satisfaction and work performance variables were computed to see how job satisfaction may be related to those variables.

Finally, in an attempt to identify drivers of employee satisfaction, a regression model was estimated using the backward stepwise procedure (Stevens, 1986). Here, employee overall job satisfaction was treated as the dependent variable and salaries and benefits, support, encouragement, guidance and help from supervisors and coworkers, training opportunities, and job-related stress were used as candidate independent variables. It is reasonable to assume that the first three variables should positively contribute to overall employee satisfaction and job-related stress may have a

negative impact. The dependent variable and the four independent variables were all measured by likert scores.

Employee backgrounds such as gender, age, education, previous training program participation and work experience may impact employee overall satisfaction and were therefore added as control variables. Female and older employees may be more concerned about job security and thus may tend to be more easily satisfied with the firm. Education level, prior training program participation, and years of work experience may also affect job satisfaction either positively or negatively. On one hand, better educated, trained and more experienced employees may perceive themselves as better qualified and may thus be pickier and less satisfied with the firm. On the other hand, higher education, more prior training and longer work experience may help lower job related stress and increase employee satisfaction. In the model estimation, gender and prior training were treated as dummy variables with 0 indicating female or without prior training and 1 indicating male or with prior training. Work experience was measured by number of years in the casino industry. Education and age were measured by numeric category values, with higher values indicating higher education levels or older age groups.

Employee backgrounds

Among the 892 surveyed participants, 472 or 52.9 percent were male and 420 or 47.1 percent were female, closely matching the male/female composition of 53.4 percent versus 46.6 percent in the entire Macao labor force reported by the Bureau of Statistics and Census of Macao (BSCM) (2006a). The surveyed employees were classified into four age groups corresponding to the age grouping by BSCM (2006). Casino workers appeared to be significantly younger than the overall labor force in Macao. Among the surveyed, those aged between 18 and 25 constituted 55.8 percent of the sample. In comparison, only 13.2 percent of the Macao workers were below 25 (BSCM, 2006a). On the other hand, those aged 45 or older were only 4.9 percent of the sample, much less than the same age group's 35.2 percent in the entire Macao workforce (BSCM, 2006a).

By education, senior high school graduates were the largest group (56.2 percent) in the sample, followed by junior school diploma holders (29.5 percent), college degree achievers (11 percent) and respondents with primary school or no school education (3.3 percent). In comparison, in the entire Macao workforce, the previously mentioned four categories were 24.4, 30.1, 17.7 and 27.8 percent, respectively (BSCM, 2006a). It seems that senior high school graduates 25 years of age or younger were the core of Macao's gaming workforce.

In terms of job positions, the majority (55.4 percent) of the sample was casino dealers, followed by floor persons and pit bosses (17.7 percent). Most of the surveyed casino employees (71.5 percent) had not participated in any training programs. By company affiliation, employees from Sociedade De Jogos De Macau (SJM) were the largest group (41.8 percent), followed by the Venetian Macao's Sands Casino (22.5 percent), Wynn Resort Macao (17.4 percent) and the Galaxy Casino (14.5 percent). The affiliation distribution in the sample approximated the four companies' 2006 gaming revenue shares in Macao.

Casino work experiences ranged from zero (new hire) to 41 years. The average casino work experience was 3.7 years, but more than half (56.1 percent) of the surveyed had no more than two years of industry experience.

Job skills and dealer ethics

Casino employees' self-assessment of job skills and work ethics was derived from answers to Questions 7-16. In Table I, the mean (3.395) of "Mandarin fluency" indicates that casino employees' Mandarin was just above mediocre but less than fluent. But the higher mean and median of "Difficulty in comm". show that casino employees' Mandarin did not hinder their communication with Mandarin speaking visitors. More than half (53.4 percent) of the respondents knew one or more foreign languages and about half (50.6 percent) knew English.

On the three interpersonal skills, namely "Smile", "Greet", and "Help" in Table I, the mean and median values suggest a performance between mediocre and satisfactory but leaning toward mediocre. In other words, Macao casino employees sometimes, rather than often, smile to patrons, greet customers and help needy guests proactively.

Regarding tip hustle ("Tip" in Table I), the high mean and median values show that casino dealers seldom asked or hinted for tips. It seems that tip hustle is no longer a common practice as it used to be. Dealers' technical skills, represented by "Mistake" and "Gaming skill" in the table, scored higher than interpersonal skills. The mean (3.689) and median (4) of "Mistake" indicate that gaming errors occur at a frequency between "sometimes" and "seldom" but leaning toward "seldom". The mean and median of "Gaming skill" are about 4, suggesting that Macao casino dealers were satisfied with their technical skills. "No. of games" shows that an average Macao casino dealer could handle 2.8 games but about half could operate no more than 2.

Job satisfaction

Table II summarizes findings on job satisfaction. The mean and median of "Overall satisfaction", "Salary & benefits", "Support" and "Training" are 3 or close to 3, implying that the employee's satisfaction with those items was just at the mediocre level. For Questions 21-23 regarding job-related stress and loyalty, the 5-point likert scale was used differently with smaller values indicating more desirable levels. In the table, "Stress" has a mean of 2.664 and a median of 3, implying a between "mild" and "average" level of job-related stress. The intent to transfer to another casino was quite low, as shown by the low mean (2.387) and median (2.000) of "Transfer". The intention of quitting the casino industry ("Quit") is even lower with a mean of 1.77 and a median of 1. This is probably due to higher earnings in the industry. In the first quarter of 2007, the monthly median employee earnings of the casino industry were 44 percent higher than the median earnings of all Macao employees (BSCM, 2007). Lee *et al.* (2006) observed job compensation's significant influence on job satisfaction and organizational commitment. Higher earnings may be a driving force for employees to stay in the casino hotel industry.

Employee overall satisfaction as related to performance

To investigate how job satisfaction may be associated with work performance, the correlations between employees' overall satisfaction and performance variables were examined. The computed coefficients of correlation indicate that there is a significant association between the two. Table III presents the coefficients of correlation and their t statistics and significance levels. As the table shows, the nine job skill variables, namely "Mandarin fluency", "Difficulty in comm", "Foreign language", "Smile", "Greet", "Help", "Mistake", "No. of games", and "Gaming skill" are all positively

Table I.
Job skills and dear ethics
assessment

	Mandarin fluency	Difficulty in communicating	Smile	Greet	Help	Mistake	Tip	No. of games	Gaming skill
Mean	3.395	4.357	3.269	3.279	3.289	3.689	3.955	2.803	4.028
Median	3.000	5.000	3.000	3.000	3.000	4.000	4.000	2.000	4.000
Std dev.	0.919	0.802	0.976	1.033	0.986	0.793	1.071	1.629	0.735

Notes: Knowledge of foreign language(s) is not included in the Table. It was treated as a dummy variable with “0” indicating knowing no foreign language(s) and “1” indicating knowing at least one foreign language. In the sample, 476 or 53.4 percent of the 892 casino employees knew at least one foreign language and 451 or 50.6 percent knew English

correlated with the employee overall satisfaction at the 0.05 or less levels except "Difficulty in comm." and "No. of Game". Further, the highly significant and positive correlation between job satisfaction and "Tip" suggests that higher job satisfaction makes tip hustle less likely to occur. The two loyalty indicators, "Transfer" and "Quit" are both negatively and significantly correlated with employee overall satisfaction, confirming that high job satisfaction helps enhance employee loyalty and lower employee turnover. Our results support Lee *et al.*'s (2006) argument that employee satisfaction adds to the human assets quality of a firm by not only ensuring customer service quality but also enhancing employee retention and commitment. The findings are also consistent with Karl and Peluchette's (2006) results that satisfied employees believed that their organization could provide customer service that was reliable, responsive, and empathetic, and that employees were knowledgeable and able to instill confidence in customers.

Drivers behind employee overall satisfaction

To determine drivers behind job satisfaction in Macao casinos, "Overall satisfaction" was treated as the dependent variable and salaries and benefits, support, encouragement, guidance and help from supervisors and coworkers, training opportunities, and job-related stress, plus a group of background factors, were used as independent variables to estimate a regression model. The backward stepwise regression resulted in a model with five significant variables including "Salary and benefits", "Training", "Support" and two control variables, "Age" and "Year". In Table IV, the five variables are listed based on the sizes of their standardized coefficients. According to Grimm and Yarnold (1995), standardized coefficients place

	Overall satisfaction	Salary and benefits	Support	Training	Stress	Transfer	Quit
Mean	3.121	2.992	2.889	3.034	2.664	2.387	1.770
Median	3.000	3.000	3.000	3.000	3.000	2.000	1.000
Std. dev.	0.856	0.882	1.139	0.935	0.983	1.156	0.978

Table II.
Job satisfaction
assessment

	Coefficient of correlation with job satisfaction	<i>t</i> -value	Sig. (one-tailed)
Mandarin fluency	0.094	2.811	0.005
Difficulty in comm.	0.056	1.681	0.093
Foreign language	0.127	3.884	0.000
Smile	0.128	3.891	0.000
Greet	0.118	3.550	0.000
Help	0.115	3.452	0.001
Mistake	0.165	3.717	0.000
Tip	0.287	6.646	0.000
No. of games	0.039	0.860	0.390
Gaming skill	0.095	2.111	0.035
Transfer	-0.405	-13.227	0.000
Quit	-0.243	-7.469	0.000

Table III.
Correlations between
employee overall
satisfaction and
performance and loyalty

all variables in the same measurement units, with means of 0 and standard deviations of 1, so that the independent contribution of each coefficient to the prediction or explanation can be identified and compared. Evidently, in the model, “Salary & benefits” is the most important satisfaction driver, followed by “Training” and “Support”. The *t*-statistics associated with the three variables, all at the 0.000 level, indicate that they are the more significant determinants than the two control variables, “Age” and “Year”, which are significant at the 0.01 and 0.05 levels, respectively.

For independent variables in the model, the tolerance values are all greater than 0.1 and the variance inflating factor (VIF) are all less than 10, indicating that multicollinearity among independent variables is not a problem for the model (Kleinbaum *et al.*, 1988). The *F*-value (98.733) indicates that the model is statistically significant at the 0.000 level and the adjusted *R* square of the model, 0.354, implies that about 35 percent of the variation in employee overall satisfaction has been explained or predicted by the five-variable model. In our model, salaries and benefits are the most important contributor to employee satisfaction in Macao casinos. The positive coefficient of “Salary & benefits” is more than three times that of “Training” and “Support”. Better salaries and benefits can surely lead to greater job satisfaction. The *HR Focus* (2007) reported that salaries and benefits were ranked as the most important ingredients of job satisfaction and Lee *et al.* (2006) also found service reward’s significant influence on employee job satisfaction. While the dominant importance of “Salary and benefits” in our model confirms what was found in previous studies, the importance of the material benefits for job satisfaction is also likely due to the fact that over a long period of time, income level for the working population in Macao has been low. At present, the annual income of a typical Macao casino dealer (wage plus tips) is about MOP160,000 (\$20,000), much lower than the \$30,000 average of a dealer in the US more than a decade ago (Nordheimer, 1994). It is the social desire to raise the material well being via higher pay and benefits from a fast growing casino industry in Macao. Recently, the Macao government distributed MOP5000 (\$625) to each Macao resident to share the benefits of casino gaming (“Legislature passed bill to distribute”, 2008). The importance of pay and benefits in making Macao people satisfied is realistic. This is the reality in Macao and may also be true in other low-income gaming jurisdictions, such as those in East Europe and Southeast Asia, when dealing with the job satisfaction issue.

In our model, “Training” is the next most important variable contributing to employee overall satisfaction. Harel and Tzafrir (1999) found training as the single significant independent variable in affecting perceived organizational performance.

	Standardized coefficient	<i>t</i>	Significance	Tolerance	VIF
Constant	0	7.998	0.000		
Year	−0.076	−2.129	0.033	0.566	1.768
Age	0.106	2.929	0.003	0.548	1.824
Support	0.129	4.423	0.000	0.857	1.167
Training	0.148	5.306	0.000	0.931	1.074
Salary and benefits	0.483	16.782	0.000	0.875	1.143

Note: Adjusted $R^2 = 0.354$, Model $F = 98.733$ ($p = 0.000$)

Table IV.
Results of backward
step-wise regression

Lee *et al.* (2006) confirmed that training was positively associated with service workers' job satisfaction and organizational commitment. The significant and positive impact of training on Macao casino employees' job satisfaction found in this study provides additional evidence on the importance of training.

Support, encouragement, guidance and help from superiors and coworkers are represented by the "Support" variable in the model. It was the third significant driver of Macao casinos' employee satisfaction. Indeed, support, encouragement, guidance and assistance for employees can help create a pleasant workplace that makes worker happy. Our finding supports the claim by the *HR Focus* (2007) that job satisfaction of service employees is affected by such elements as communication between employees and senior management, relationship with immediate supervisor, and management recognition of employee job.

Though contributing less to the explanation of employee overall satisfaction, the two control variables, namely "Age" and "Year" deserve our attention. "Age" is positively correlated with job satisfaction, suggesting that younger employees are less likely to be satisfied with the firm. On the other hand, "Year" has a negative coefficient, implying that job satisfaction decreases overtime. Our survey indicates that about 55.8 percent of the casino employees were 18-25 years of age. Therefore, how to satisfy young employees and make them loyal to the firm overtime is a big challenge to Macao casinos.

Implications, suggestions, limitations and future research

The findings of this survey-based study carry important implications for the Macao casino industry regarding improvement of its labor force quality. First of all, as performance on interpersonal skills was found weaker than that of technical or gaming skills, Macao casino hotels should pay more attention to interpersonal skills in training. Employees need to learn how to greet, help and smile to customers properly. Here, cultivating a customer-above-all mindset among casino workers is extremely important. Only with such a mind-set, can the casino workers make guests feel at home.

Second, language ability is critical because it affects both interpersonal and technical skills. Although Macao casino employees' Mandarin was not hindering their communication with guests, the less than fluent Mandarin proficiency is inadequate for Macao to embrace a fast growing Mainland Chinese market. To catch up with its increasing gaming capacity, Macao needs to expand the market from China's coastal regions into inland provinces. With more inland Chinese cities to be approved for Individual Travel Scheme (ITS), a scheme allowing Chinese citizens to visit Hong Kong and Macao individually, more inland Chinese tourists, who speak Mandarin with various accents, will visit Macao. A Mandarin proficiency that is less than fluent would be insufficient for Macao to accommodate increasing inland Chinese visitors. Efforts should be made to raise Macao casino employees' Mandarin fluency and Mandarin should remain an important component of employee training.

At present, Macao is a regional gaming destination with 98.14 percent of visitors coming from Mainland China, Hong Kong and Taiwan (BSCM, 2006b). Being a regional destination accommodating mainly Chinese players, Macao for now may not feel an urgent need to raise the employees' English ability. However, if Macao is to diversify its markets by attracting more foreigners and to make itself an international

destination like Las Vegas, only half of its employees knowing English would be insufficient. Furthermore, with more US company-operated casinos opening in Macao, more English-speaking casino managers and supervisors will be hired from abroad. Raising the English ability of local employees would be necessary for facilitating the communication among employees, especially between dealers and supervisors, in a more internationalized workplace. Good communication increases the mutual understanding between workers and the management, thus helping enhance employee job satisfaction, performance and service quality.

Finally, casino employee's overall satisfaction was found significantly correlated with job skills and employee loyalty. Job satisfaction backs up work performance and our regression model shows that salaries and benefits are the most important contributor to job satisfaction. In today's Macao gaming market where casino firms are facing heated competition for qualified labors, offering attractive salaries and benefits is necessary to recruit and retain high-quality workers. However, overly depending on salaries and benefits to sustain job satisfaction may not be the best strategy. Excessive salaries and benefits will further cut into the operation profits of Macao casinos that are subject to one of the highest gaming taxes rate (40 percent) in the world. For Macao casino hotels, a better alternative may be relying more on the other two significant drivers of job satisfaction, namely "Training" and "Support", to boost employee job satisfaction.

In this regard, on-the-job training, or the training provided by experienced employees and management to new hires or inexperienced workers in the workplace, may be an optimal approach. As indicated earlier, 56.1 percent of the surveyed had no more than two years of casino work experience. Having experienced coworkers and supervisors train new hires in the workplace can improve the latter's job skills on a continuing basis. In the meantime, the support, help, guidance, and encouragement conveyed to the new hires during the on-the-job training process will certainly help build up a pleasant relationship between workers and management and among all employees. On-the-job training would take care of both "Training" and "Support" factors in the model, thus having the "One stone, two birds" effect on creating employee satisfaction.

Providing on-the-job training to update and broaden employee skills is a common practice in Las Vegas casino hotels. Las Vegas casinos frequently provide in-house English language training seminars for dealers whose native languages are not English. Floor persons are often engaged in worksite training to catch up with new developments in games. Macao casinos may follow suit to conduct similar training programs. Another approach that Macao may learn from Las Vegas is to encourage employees' career development by sponsoring their participation in external education programs. Many Las Vegas casino hotels cover the tuitions of their employees who pursue college degrees. While the financial support can increase employee job satisfaction and loyalty, it is also a good investment in the workforce quality in the long run.

Our survey shows that 71.5 percent of the employees had never participated in any training programs and the majority of casino workers were young people. On the other hand, our regression model implies that younger employees are less likely to be satisfied with the firm but training can help increase employee satisfaction. Therefore, there is indeed a need for Macao casino hotels to step up training to improve work

performance and maintain employees' satisfaction. Macao casinos should promote on-the-job training not only as a means to improve work performance and service quality but also as a corporate culture to enhance job satisfaction and employee loyalty.

Several limitations of the study must be pointed out here. First, the estimated regression model has relatively low explanatory power, as indicated by its adjusted *R*-square. In practice, casino employees' job satisfaction may be affected by many other physical factors as presented in a particular working environment (e.g. smoking area vs. non-smoking area, clientele such as mass-market operation vs. VIP-room operation, etc.), as well as personal factors (e.g. religion and previous job, family size, etc.). Future research may include more potential job satisfaction variables in the survey to find out how employee job satisfaction may be maximized. Second, while the convenience sampling method can be used for an exploratory such as ours, probability sampling is certainly more desirable. Follow-up studies on the issue may use probability sampling, if possible, to ensure that different members in the casino labor population have their fair probabilities of being chosen. Finally, although absolute confidentiality was promised to survey respondents to minimize social desirability bias, it cannot be guaranteed that such bias is eliminated in self-assessment answers. If a future study is to examine the Macao casino workforce performance alone, then a customer survey would be desirable for providing a performance assessment free of social desirability bias.

Conclusions

To be a top casino gaming destination in the world, Macao needs not only to generate top gaming revenue but also to provide top customer services. Customer services are produced by casino employees and are thus backed up by the workforce performance. To provide its visitors with first-class gaming experiences, Macao must have a first-class casino labor force.

Many things need to be done to improve Macao casino employees' work performance; but the priority is to improve employees' interpersonal skills to strengthen the humanization aspect of Macao casinos' customer services. Furthermore, employees' language ability should be enhanced for both Mandarin fluency and English knowledge so that Macao can meet the demand of an expanding Mainland Chinese market and the need for becoming a more internationalized market and workplace. Finally, Macao casinos should step up on-the-job training as a mechanism not only to improve employee job skills but also to boost job satisfaction and work performance.

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